

WHAT IS CLAIMED IS:

1. An adjustable pier for supporting a structure on a base, said pier comprising:
a lower support member defining an internal chamber; and
an upper support member at least partly received in the chamber and extending upwardly from
the lower support member,
said upper support member being upwardly shiftable relative to the lower support member,
said lower support member defining an opening for providing lateral access to the internal
chamber from outside the lower support member.
2. The adjustable pier of claim 1,
said upper and lower support members being telescopically intercoupled.
3. The adjustable pier of claim 1,
said opening having a height that is at least 50% of the maximum height of the upper support
member.
4. The adjustable pier of claim 1; and
a stop member being disposed between the upper and lower support members and below the
bottom of the upper support member;
said stop member being at least substantially received in the internal chamber.
5. The adjustable pier of claim 4,
said stop member comprising a cured grout.
6. The adjustable pier of claim 5,
said cured grout filling substantially all of the internal chamber located below the upper support
member.

7. The adjustable pier of claim 1,
one of said upper and lower support members presenting a laterally extending projection,
the other of said upper and lower support members defining an upwardly extending groove
receiving at least a portion of the projection.
8. The adjustable pier of claim 7,
said projection being matingly received in the groove so that the projection and groove
cooperating to restrain non-translational shifting of the upper and lower support members
relative to one another, while permitting upward translational shifting of the upper support
member relative to the lower support member.
9. The adjustable pier of claim 8,
said groove extending substantially linearly for at least 6 inches,
said projection extending substantially linearly for at least 3 inches.
10. The adjustable pier of claim 1; and
a metallic bearing device coupling the upper support member to the structure.
11. The adjustable pier of claim 10,
said metallic bearing device including a lower section and an upper section,
said lower section being rigidly coupled to the upper support member,
said upper section being rigidly coupled to the structure,
said upper and lower sections being hingedly intercoupled.
12. The adjustable pier of claim 1,
said lower support member presenting a pair of inwardly and oppositely facing inner surfaces,
each of said inner surfaces defining at least a portion of the internal chamber,
each of said inner surfaces including a first upwardly extending groove or a first projection.

13. The adjustable pier of claim 12,
said upper support member presenting a pair of outwardly and oppositely facing outer surfaces,
each of said outer surfaces including a second upwardly extending groove or a second projection.
14. The adjustable pier of claim 13,
each of said outer surfaces of the upper support member being disposed adjacent a respective one
of the inner surfaces of the lower support member,
each pair of adjacent inner and outer surfaces cooperating so that either the first projection is
received in the second upwardly extending groove or the second projection is received in the
first upwardly extending groove.
15. The adjustable pier of claim 1,
said structure being a residential home,
said base being a spread footing or a grade beam.

16. An adjustable support system for supporting a building structure on a relatively unstable soil, said support system comprising:

a base member supported by the soil;

an adjustable pier supported on the base member, said pier including a lower support member coupled to the base member and an upper support member telescopically intercoupled with the lower support member; and

a bearing device including a lower section rigidly coupled to the upper support member and an upper section rigidly coupled to the building structure, said upper and lower sections being hingedly intercoupled.

17. The support system of claim 16,

said lower support member defining an internal chamber receiving at least a portion of the upper support member,

said lower support member defining an opening for providing lateral access to the internal chamber from outside the lower support member.

18. The support system of claim 17,

said opening extending along substantially the entire height of the internal chamber.

19. The support system of claim 16,

said lower support member surrounding the upper support member on at least three sides.

20. The support system of claim 16,

said lower member presenting a pair of opposing inwardly facing inner surfaces,

said upper support member presenting a pair of outwardly facing outer surfaces,

each of said outer surfaces being disposed adjacent a respective inner surface,

each pair of adjacent inner and outer surfaces having an elongate groove associated with one of the surfaces and an elongated projection associated with the other of the surfaces, with the elongated projection being received in the elongated groove.

21. The support system of claim 16; and
a cured grout disposed in the internal chamber below the bottom of the upper support member,
said cured grout contacting the upper and lower support members to thereby prevent downward
shifting of the upper support member relative to the lower support member.

22. The support system of claim 16,
said base member being formed primarily of concrete,
said pier being formed primarily of concrete,
said bearing device being formed primarily of a metal.

23. The support system of claim 16,
said building structure being a residential home,
said base member being a grade beam or a spread footing.

24. A method of leveling a building structure supported on a base by an adjustable pier, said adjustable pier including telescopically intercoupled upper and lower support members, said method comprising the steps of:

- (a) raising at least a portion of the building structure relative to the base to thereby cause extension of the adjustable pier; and
- (b) inserting a stop member between the upper and lower support members and below the bottom of the upper support member to thereby inhibit retraction of the adjustable pier.

25. The method of claim 24,

- step (a) including exerting a sufficient upward force on the building structure to raise the building structure; and
- (c) subsequent to step (b), removing the upward force on the building structure so that the building structure is at least partially supported by the adjustable pier.

26. The method of claim 25,

said upward force being exerted at a location spaced from the adjustable pier.

27. The method of claim 25,

said stop member being a curable grout.

28. The method of claim 27; and

- (d) curing the grout between steps (b) and (c).

29. The method of claim 24,

said lower support member defining an internal chamber receiving at least a portion of the upper support member,

said lower support member defining a lateral opening for permitting access to the internal chamber from outside the lower support member.

30. The method of claim 29,
step (b) including inserting the stop member into the internal chamber through the lateral opening.

31. The method of claim 29,
step (b) including filling the internal chamber located below the upper support member with a curable grout.

32. The method of claim 29,
said lower support member being coupled to the base,
said upper support member being coupled to the building structure so that step (a) causes the lower support member to automatically shift upwardly relative to the upper support member.

33. The method of claim 32,
said adjustable pier further comprising a bearing device for coupling the upper support member to the building structure,
said bearing device including an upper portion rigidly coupled to the building structure and a lower portion rigidly coupled to the upper support member,
said upper and lower portions of the bearing device being hingedly intercoupled.

34. The method of claim 29,
one of said upper and lower support members presenting a projection,
the other of said upper and lower support members defining an upwardly extending groove receiving at least a portion of the projection,
step (a) including causing the projection to shift upwardly within the groove.

35. The method of claim 24,
said base being a grade beam or a spread footing.